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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,671	06/26/2001	Derek A. Pratt	N-6636	9766
7590 03/05/2004 STITES & HARBISON 424 CHURCH STREET SUITE 1800 NASHVILLE, TN 37219			EXAMINER TRUONG, TAMTHOM NGO	
			ART UNIT	PAPER NUMBER
			1624	

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,671

Applicant(s)

PRATT ET AL.

Examiner

Tamthom N. Truong

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-42, 44-48 and 51-63 is/are pending in the application.
- 4a) Of the above claim(s) 53-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-42, 48, 51 and 52 is/are rejected.
- 7) ☒ Claim(s) 44-47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendment of 02-02-04 is acknowledged. The following response is presented.

Withdrawal of Finality: Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. Also, a new reference is found which raises a new ground of rejection.

Filing Date: It's acknowledged the filing date of June 25, 2001 has been granted in the petition of January 31, 2002. However, the examiner does not have access to the system for fixing the filing date. Applicant is advised to contact the Office of Initial Patent Examination (OIPE).

Claims 53-63: These claims were not **originally presented**, and are drawn to different methods of use. That is, claims 53-61 are drawn to **"a method of stabilizing a monomer"**, and claims 62 and 63 are drawn to **"a method of inhibiting the oxidation of a polymer"**. Therefore, they are not considered as per 37 C.F.R. 1.142(b) and MPEP § 821.03. The restriction was presented to show that the new claims are drawn to different inventions.

Thus claims 53-63 are still held withdrawn from consideration.

With claims 43, 49, and 50 cancelled, only claims 32-42, 44-48, 51, and 52 remain for consideration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 32-35, 37, 40, 42, 48, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Henrie, II et. al.** (US 5,521,192 – cited on IDS) as applied to claims above, and further in view of **Treybig et. al.** (US 4,871,848).

On column 6, **Henrie et. al.** disclose a salt of 2,4-diamino-5-hydroxy-pyrimidine. The free form 2,4-diamino-5-hydroxy-pyrimidine reads on formula 4 in claim 32 when R₁ is amino; R₂ is hydrogen, and R₃ is an electron-donating substituent. It also reads on the compound recited in claims 35, 37 as R₁ and R₃ represent amino groups. Likewise, said free form reads on the formulae in claims 40 and 42 as R₂, R₄, R₅, and R₆ represent hydrogen atoms. The teaching of **Henrie et. al.** differs from the instant claims by not relating the disclosed compound to a method of reducing the rate of oxidation in a petroleum composition.

Such a difference can be remedied by the teaching of **Treybig et. al.** On column 3, **Treybig et. al.** disclose several aromatic nitrogen-containing heterocycles, including pyrimidines (as a class) that are used in a composition to inhibit corrosion in oil or gas well. Then, on columns 24-25, **Treybig et. al.** suggest that “*the corrosion inhibitors of this invention are*

*suitable for the protection of metal alloys against corrosion due to **corrosive fluids produced in oil and gas well formation...***” Clearly Treybig et. al. recognize that oil and gas can be oxidized and produce corrosive fluids, and that pyrimidines (as a class) can reduce the oxidation in oil and gas which in turn inhibits the corrosion of oil or gas well. Furthermore, it is understood in the chemical art that corrosion is often caused by oxidation.

Therefore, with the teaching of Treybig et. al., one of the ordinary skill in the art would have been motivated to apply the pyrimidine compound of Henrie et. al. in a method of reducing the rate of oxidation in a petroleum composition as recited in claims 32-34, 48, 51, and 52 as well as those recited in claims 35, 37, 40, and 42.

Thus, at the time of the invention, it would have been obvious to one skill in the art to develop the claimed method in view of the combined teachings above.

2. Claims 32, 35, 36, 38, 39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over **LaMattina** (US 4,554,276 – cited on IDS) as applied to claims above, and further in view of **Treybig et. al.** (US’848).

On column 10 of US’276, in Example 7, LaMattina discloses a compound of *2-amino-5-hydroxy-4-methylpyrimidine* which reads on the formula of claims 32, 35, 36 as either R₁ or R₂ is hydrogen while the other is alkyl, and R₃ is amino. It also reads on formula 7 of claims 38, 39 and 41 as either R₁ or R₂ is hydrogen while the other is methyl, and R₄ is hydrogen. The teaching of LaMattina differs from the instant claims by not relating said compound to a method of reducing the rate of oxidation in a petroleum composition.

Again, said difference can be remedied by the teaching of Treybig et. al. That is, pyrimidines as a class can be used in a composition to inhibit corrosion of oil or gas well, which suggests reducing the oxidation in the oil or gas composition.

Thus, at time of the invention, it would have been obvious for one skilled in the art to apply the compound of LaMattina in a methods claimed herein in view of the teaching of Treybig et. al.

Claim Objections

3. Claims 44-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Those claims recite species that are not disclosed in Henrie et. al. or LaMattina, and the teaching of Treybig et. al. is too broad for a prima facie case of obviousness on the method using species in those claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 571-272-0676. The examiner can normally be reached on M-T (~10 am ~ 8:30 pm) starting from February 22nd, 2004.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mukund Shah can be reached at 571-272-0674. If you are unable to reach Dr. Shah within a 24 hour period, please contact James O. Wilson, Acting SPE of 1624, at 571-272-0661.

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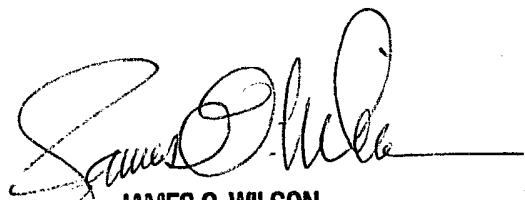
The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



T. Truong

February 25, 2004



JAMES O. WILSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600